

CLAIMS:

1. (original) An electrical motor, comprising:
a housing;
a plurality of discs stacked within the housing to form a stator, the discs having slots that align with one another to form passages;
a tube of dielectric film inserted within each of the passages, each of the tubes defining a sealed outer margin; and
a plurality of windings inserted through each of the tubes.
2. (original) The motor according to claim 1, wherein the dielectric film is nonmeltable.
3. (original) The motor according to claim 1, wherein the dielectric film of each of the tubes is nonmeltable and is bonded to a carrier layer of a meltable material.
4. (original) The motor according to claim 1, wherein the dielectric film of each of the tubes has overlapping edges and is bonded to a carrier layer of a thermoplastic material.
5. (original) The motor according to claim 1, wherein the slots have side edges that are straight and outer edges that are curved, and wherein the tubes have portions that are substantially flush with the side edges and the outer edges.
6. (original) The motor according to claim 1, wherein a wall thickness of the tube is in the range from .003 to .009 inch.

7. (original) The motor according to claim 1, wherein each of the tubes has a cross-sectional area that is substantially equal to a cross-sectional area of each of the slots.

8. (original) An electrical motor, comprising:

a housing;

a plurality of discs stacked within the housing to form a stator, the discs having slots that align with one another to form passages;

a tube inserted within each of the passages, each of the tubes having a layer of a dielectric film that has overlapping edges and which is bonded to a layer of a material that fuses to the dielectric film to form a continuous sidewall; and

a plurality of windings inserted through each of the tubes.

9. (original) The motor according to claim 8, wherein each of the slots has two side portions that are straight and an outer edge portion that is curved, and wherein each of the tubes has straight portions that are substantially flush with the side portions, and a curved portion substantially flush with the outer edge portion.

10. (original) The motor according to claim 8, wherein each of the tubes has a wall thickness in the range from .003 to .009 inch.

11. (original) The motor according to claim 8, wherein each of the tubes has a circumference that is substantially equal to a perimeter of each of the slots.

12. (original) The motor according to claim 8, wherein the dielectric film of the tube comprises polyimide.

13. -18. (canceled)

19. (new) An electrical motor, comprising:

a housing;

a plurality of discs stacked within the housing to form a stator, the discs having slots that align with one another to form passages;

a plurality of tubes, each of the tubes being inserted into one of the passages and comprising a layer of dielectric film and a layer of carrier material that are spirally wound together to create overlapping edges, the overlapping edges being heat fused together to form a continuous sidewall; and

a plurality of windings inserted through each of the tubes.

20. (new) The motor according to claim 19, wherein the dielectric film of each of the tubes is formed of polyimide and the carrier film of each of the tubes is formed of a thermoplastic material.

21. (new) The motor according to claim 19, wherein the dielectric of each of the tubes is formed of polyimide and the carrier film of each of the tubes is formed of a fluoropolymer.